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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,926	01/29/2002	Shogo Yamaguchi	218865US2RD	3726
22850	7590	02/27/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BASOM, BLAINE T	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/057,926	Applicant(s) YAMAGUCHI ET AL.	
	Examiner Blaine Basom	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-11 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is responsive to the Request for Continued Examination (RCE) filed under 37 CFR §1.53(d) for the instant application on 9/19/2005. The Applicants have properly set forth the RCE, which has been entered into the application, and an examination on the merits follows herewith.

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 7, 13, and 14, in addition to the Applicants' cancellation of claims 6, 12, and 19. Regarding the pending claims the Applicants assert that Yasukawa (U.S. Patent No. 6,437,786 to Yasukawa), presented in the previous Office Action, does not teach image files that are given in advance prescribed priority levels based on attributes of the image files, such that images of which storing states are to be changed are selected according to these priority levels. In response, the Examiner presents the U.S. Patent of Smith (U.S. Patent No. 6,195,530 to Smith et al.), which as shown below, teaches assigning priority levels in advance to image files for the purpose of selecting images files for which storing states are to be changed. The Applicants' arguments have thus been considered, but are moot in view of the following new grounds of rejection.

Claim Objections

Claims 1, 7, 13, 14, and claims dependent thereon, are objected to because of the following informalities: Each of claims 1, 7, 13, and 14, expresses both a “storage device” and a “storing device.” Moreover, claims dependent upon claims 1, 7, 13, or 14 recite either a “storage device” or a “storing device.” Such terminology should be made consistent in order to avoid confusion. Appropriate correction is thus required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 13 expresses a “computer program product” comprising a first computer program code, a second computer program code, a third computer program code, and a fourth computer program code. There is, however, no recitation of any tangible embodiment of such a “computer program product,” i.e. there is no recitation that the computer program product comprises a tangible machine readable storage medium for the computer program code, and therefore, the computer program product of claim 13 considered non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 7, 9, 11, 13-14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,437,786, which is attributed to Yasukawa, and also over U.S. Patent No. 6,195,530, which is attributed to Smith et al. (hereafter referred to as "Smith").

Referring to claims 1, 7, 13, and 14, Yasukawa discloses a server for transmitting, and a projector for receiving, images files to be displayed during a presentation (see column 2, line 44 – column 3, line 17). Yasukawa further discloses that the projector comprises a storage device (RAM [6]) configured to store image files received from the server (see column 9, lines 23-55). Yasukawa discloses that the server can be operated and arranged at the site of the presentation (see Figure 4: the projector [31] is directly connected to the server [32A] via a communication cable [33]). Yasukawa also discloses that the projector comprises software for controlling and monitoring the transfer of image files from the server to the projector (see column 10, lines 1-12). This software corresponds to the claimed monitoring unit and storing state changing unit. More specifically, Yasukawa discloses that a controller [61] first checks the capacity of the empty space when images are to be downloaded. If there is insufficient space to hold all of the downloadable image data, "unnecessary" data is detected and removed from RAM so as to make room for the downloadable image data (see column 13, lines 11-29). Accordingly, the storing state of the image data presently stored in RAM [6] is changed to make room for the

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downloadable image data. Yasukawa is thus considered to teach: storing in a storage device image files received from a transmitting side apparatus, i.e. a server, to be operated and arranged at a site of a presentation; monitoring a state of storing the image files in the storage device; selecting image files of which storing states are to be changed, when the monitoring detects that the storing of one image file that is currently received or scheduled to be received from the transmitting side apparatus is impossible, so as to make the storing of the one image file into the storing device possible; and changing at least a part of the storing states of the images files selected by the selecting, as is expressed in each of claims 1, 7, 13, and 14. As described above, Yasukawa discloses that if there is insufficient space to hold all of the downloadable image data, “unnecessary” image files are detected and removed from RAM so as to make room for the downloadable image data. Yasukawa, however, does not explicitly describe the scheme used for determining such unnecessary image files, and thus does not teach image files that are given in advance prescribed priority levels based on attributes of the image files, such that images of which storing states are to be changed are selected according to these priority levels, as is expressed in each of claims 1, 7, 13, and 14. Nevertheless, schemes for determining unnecessary data to remove from storage are well known in the art, including those that involve priority levels.

For example, Smith similarly describes a system whereby image files, each representing a screen of information, are transmitted from a transmitting side apparatus to a receiving side apparatus for presentation (for example, see column 1, line 50 – column 2, line 10; column 2, lines 32-60; and column 9, lines 3-31). Further like Yasukawa, Smith discloses that the receiving side apparatus monitors its storage, such that if the storage of a received screen is

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impossible, one or more screens in storage may removed in order make room for the received screen (for example, see column 1, line 60 – column 2, line 10; and column 9, line 51 – column 10, line 47). Smith particularly discloses that the screens are given, in advance, priority levels based on attributes of the screens, so that screens which are to be removed are selected according to these priority levels (for example, see column 6, line 12 – column 7, line 44; and column 9, line 51 – column 10, line 47).

It would have been obvious to one of ordinary skill in the art, having the teachings of Yasukawa and Smith before him at the time the invention was made, to modify the image files taught by Yasukawa, such they are each given in advance priority levels used to determine image files to remove from storage, as is done by Smith. It would have been advantageous to one of ordinary skill to utilize this combination, because such a priority-based removal scheme may be more efficient than other methods for choosing data items to remove from storage, as is suggested by Smith (for example, see column 1, line 60 – column 2, line 25). Moreover, it is understood that such a priority-based removal scheme may better ensure that image files that are subsequently accessed remain in memory, thus improving system response time (for example, see column 9, lines 3-13 of Smith).

Regarding claims 3, 9, and 16, Yasukawa discloses that the controller [61] first checks the capacity of the empty space in storage when images are to be downloaded (see column 13, lines 11-29). The above-described combination of Yasukawa and Smith thus teaches monitoring the state of storing the image files in a storage device by checking a vacant capacity in the storing device, as is expressed in claims 3, 9, and 16.

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As per claims 5, 11, and 18, Yasukawa discloses that the storing state changing unit changes the storing state of the image files by detecting and deleting unnecessary image files (see column 13, lines 11-29). The above-described combination of Yasukawa and Smith thus teaches deleting at least a part of the images files stored in the storage device, as is expressed in claims 5, 11, and 18.

Claims 2, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yasukawa and Smith, which is described above, and also over Japanese Patent No. 5-216885, which is attributed to Iwamoto. Yasukawa and Smith, in combination, disclose the limitation of claims 1, 7, and 14, as discussed above, but fail to disclose notifying the transmitting apparatus when the storing state changing unit changes the storing states of images files in the storage device, as recited in claims 2, 8, and 15. Iwamoto, however, discloses in the English abstract means for notifying a transmitting apparatus of changes to the storing states of documents stored in a storage device. This proves beneficial because the transmitting apparatus may be waiting for a response from the receiving apparatus to know that there is sufficient space to store the documents. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to notify the transmitting apparatus of changes to the storing states of documents stored in the storage device, as taught by Iwamoto in combination with the teachings of Yasukawa and Smith, because the transmitting apparatus would benefit from knowing when there is sufficient space to transmit the image files.

Claims 4, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Yasukawa and Smith, which is described above, and also over U.S. Patent No. 5,987,323, which is attributed to Huotari. Yasukawa and Smith, in combination, disclose the limitation of claims 3, 9, and 16, as discussed above, but fail to disclose that the transmitting apparatus is notified of information indicating the vacant capacity in the storage device, as is expressed in claims 4, 10, and 17. Huotari, though, discloses a system in which a transmitting apparatus is waiting to send a message to a receiving apparatus (see column 7, line 61 – column 8, line 8). The transmitting apparatus only sends the message to the receiving apparatus after it receives a Memory Capacity Available message. This procedure ensures that no message will be transmitted to the receiving apparatus when there is insufficient space and thus become corrupted or lost. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to notify the transmitting apparatus of information indicating the vacant capacity in the storage device, as taught by Huotari in combination with the teachings of Yasukawa and Smith, because it would have been beneficial to verify the capacity status with the transmitting unit to prevent loss or corruption of data.

Conclusion

In responding to this Office Action, please note that the Examiner of record for this Application has changed. Please direct all future correspondence to Blaine Basom, whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb
2/21/2006

